

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSHIHARU MIYAKE

Appeal No. 1996-1573
Application 08/186,160¹

HEARD: October 21, 1999

Before KIMLIN, JOHN D. SMITH and KRATZ, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-12, all the claims remaining in the present application. Claim 1 is illustrative:

¹ Application for patent filed January 25, 1994.

1. A superplastic aluminum alloy comprising from 4 to 15% by weight of Mg, from 0.1 to 1.0% by weight of one or more elements selected from the group consisting of misch metal, Zr, V, W, Ti, Nb, Ca, Co, Mo and Ta, and the balance being Al and unavoidable impurities, wherein the alloy (i) contains 0.1 to 4.0% by volume of dispersed spheroidal precipitates of intermetallic compounds having a particle size of 10 to 200nm, and (ii) has a grain structure wherein the mean grain size is from 0.1 to 10 μm , and from 10 to 50% of the grain boundaries have a misorientation of less than 15°.

The examiner relies upon the following references as evidence of obviousness:

Watts et al. (Watts)	3,876,474	Apr. 08, 1975
Watanabe et al. (Watanabe) ²	4,654,543	Feb. 24, 1987
Sawtell et al. (Sawtell)	4,689,090	Aug. 25, 1987
Watanabe et al. (British '694) ³	GB 2 135 694	Sep. 05, 1984

Hales, S.J. et al. (Hales), "Grain Refinement and Superplasticity in a Lithium Containing Al-Mg Alloy by Thermomechanical Processing", Journal de Physique, vol. 48, no. 9, pp. C3 285-C3 291. (Sep.1987)

Appellants' claimed invention is directed to a superplastic aluminum alloy comprising from 4 to 15% by weight of Mg, from 0.1 to 1.0% by weight of one of the recited elements, and aluminum. The alloy has the specified grain structure and grain boundaries, and also contains dispersed spheroidal precipitates of intermetallic compounds having the recited particle size.

² U.S. equivalent of and used interchangeably with GB 2 135 694 by the examiner in the examiner's answer.

³ British equivalent of and used interchangeably with U.S. 4,654,543 by examiner in the examiner's answer.

Appeal No. 1996-1573
Application No. 08/186,160

Appealed claims 1-4 and 8-12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watts. Claims 1, 3, 4, 8, 10 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watanabe or British '694. Claims 1, 2, 8 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hales. Also, claims 5-7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Watts, Watanabe (or British '694) or Hales in view of Sawtell.

Upon careful consideration of the opposing arguments presented on appeal, we concur with appellants that the examiner has not established a prima facie case of obviousness for the claimed subject matter. Accordingly, we will not sustain the examiner's rejections.

The examiner acknowledges at page 4 of the answer that "[t]he prior art differs from the claims on appeal in that the prior art is silent with respect to the particle size of any intermetallic precipitates in the alloys, or to the grain size of the alloys." Nevertheless, it is the examiner's position that "[b]ecause the composition and processing history of the Watts, Watanabe, or Hales alloys may be the same as those of the alloys of the appealed claims, a prima facie case of obviousness has been established therebetween." (page 4 of answer).

It is well settled that when a claimed composition reasonably appears to be substantially the same as a composition disclosed by the prior art, the burden is

Appeal No. 1996-1573
Application No. 08/186,160

properly on the applicant to prove that the prior art composition does not necessarily or inherently possess characteristics or properties attributed to the claimed composition. In re Spada 911 Fd.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990); In re Best 562 Fd.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). However, before this burden is placed upon the applicant, the examiner shoulders the initial burden of providing a rational basis for concluding that the claimed composition and the prior art composition appear to be substantially the same. A typical way for the examiner to satisfy this burden is to show a close correspondence between the processes employed by the applicant and the prior art to formulate the compositions.

In the present case, since the examiner acknowledges that the applied references do not disclose the claimed properties of appellants' superplastic aluminum alloy, the examiner must demonstrate that the prior art processes for making the disclosed superplastic aluminum alloys are essentially the same as the process utilized by appellants. However, the examiner's answer is totally devoid of such requisite analysis. Whereas appellants contend that the claimed properties of the alloy are a result of the disclosed steps for homogenizing, first-working, precipitation and second-working, the examiner has failed to show that the processes of Watts, Watanabe and Hales for making the aluminum alloys are sufficiently similar to appellants' process to

Appeal No. 1996-1573
Application No. 08/186,160

warrant the conclusion that the prior art alloys necessarily or inherently possess the claimed properties. Accordingly, the examiner has not made out a prima facie case of obviousness for the claimed invention.

Based on the foregoing, we are constrained to reverse the examiner's rejections.

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN D. SMITH)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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PETER F. KRATZ)	
Administrative Patent Judge)	

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Appeal No. 1996-1573
Application No. 08/186,160

Finnegan, Henderson, Farabow
Garrett and Danner
1300 I Street, NW
Washington, DC 20005